UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.   | FILING DATE          | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------------|----------------------|---------------------|------------------|
| 10/576,722  | 04/21/2006           | Shintaro Hikasa      | 289279US0PCT        | 4366             |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET |                      |                      | EXAMINER            |                  |
|   |                      |                      | ROLLAND, ALEX A     |                  |
| ALEXANDRIA  | ALEXANDRIA, VA 22314 |                      | ART UNIT            | PAPER NUMBER     |
|   |                      |                      | 1712                |                  |
|   |                      |                      |                     |                  |
|   |                      |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|   |                      |                      | 06/22/2010          | ELECTRONIC       |

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

|   | Application No.   | Applicant(s)  |       |
|---|---|---|-------|
|   | 10/576,722  | HIKASA ET AL.   |       |
| Office Action Summary   | Examiner  | Art Unit  |       |
|   | ALEX ROLLAND  | 1712  |       |
| The MAILING DATE of this communicate<br>Period for Reply  | ion appears on the cover sheet w  | ith the correspondence address  |       |
| A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAIL  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutor Failure to reply within the set or extended period for reply will, I Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | ING DATE OF THIS COMMUN<br>CFR 1.136(a). In no event, however, may a<br>ation.<br>y period will apply and will expire SIX (6) MO<br>by statute, cause the application to become A | CATION. reply be timely filed NTHS from the mailing date of this communic BANDONED (35 U.S.C. § 133). |       |
| Status  |   |   |       |
| 1) Responsive to communication(s) filed o   | ☐ This action is non-final.<br>allowance except for formal mat  | • •   | :s is |
| Disposition of Claims   |   |   |       |
| 4) ☐ Claim(s) 1-22 is/are pending in the appl 4a) Of the above claim(s) 1-7 is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 8-22 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction  Application Papers 9) ☐ The specification is objected to by the Example 10 ☐ The drawing(s) filed on is/are: a)   | drawn from consideration.  and/or election requirement.  caminer.   | by the Examiner.  |       |
| Applicant may not request that any objection Replacement drawing sheet(s) including the  11) The oath or declaration is objected to by  | to the drawing(s) be held in abeya<br>correction is required if the drawing   | nce. See 37 CFR 1.85(a).<br>I(s) is objected to. See 37 CFR 1.12                                      |       |
| Priority under 35 U.S.C. § 119  |   |   |       |
| <ul> <li>12) Acknowledgment is made of a claim for the a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents.</li> <li>2. Certified copies of the priority documents.</li> <li>3. Copies of the certified copies of the application from the International.</li> <li>* See the attached detailed Office action for the application from the International.</li> </ul>   | cuments have been received.<br>cuments have been received in a<br>ne priority documents have beer<br>Bureau (PCT Rule 17.2(a)).   | Application No  received in this National Stage   | ,     |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-83) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date  | 948) Paper No   | Summary (PTO-413)<br>s)/Mail Date<br>informal Patent Application<br>                                  |       |

Art Unit: 1712

# **DETAILED ACTION**

#### Election/Restrictions

- 1. Claims 1-7 are withdrawn from further consideration pursuant to 37 CFR
- 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1712

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 8-11, 13-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4231829 to Marui et al in view of US 3316190 to Suzumura et al.

Claim 8, 21-22:

Marui teaches a process of transferring a pattern printed on a thin film of polyvinyl alcohol resin to a surface of an object by pressing the object to the thin film floated on the surface of the water (abstract). The film comprises 100 parts PVA polymer and .2 parts non-ionic surface active agent (claimed "surfactant") (col. 9, lines 41-49).

Additionally, Marui teaches that the extension rate of the film is at most about 60% (col. 5, lines 62-67). Marui is unclear as to the exact non-ionic surface active agent used. However, Suzumura teaches a cold water-soluble PVA film that is non-sticky at high humidity (col. 1, lines 10-14) and that surface active agents improve the cold water-solubility and reduces stickiness (col. 1, lines 51-67) wherein typical nonionic surface active agents include ethylene oxide adducts of lauryl alcohol (col. 2, lines 20-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use ethylene oxide adducts of lauryl alcohol as the non-ionic surface agent of Marui because Suzumura states that it is a suitable surface active agent for achieving the goal of improved cold water solubility and reduced stickiness. Additionally, the

extension ratio under any conditions and the surface tension of the surfactant under any conditions are found to be properties of the claimed composition. Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Additionally, "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

#### Claim 9:

The thin film additionally contains 10 parts of glycerin (Marui, col. 9, line 46) which is a plasticizer as defined by Applicant's specification (pg. 23).

## Claim 10:

The thin film can additionally contain up to 50% starch (Marui, col. 3, lines 38-50) but preferably 10 parts (Marui, col. 8, lines 14-15).

# Claim 11:

The thin film contains .5 parts boric acid (Marui, col. 9, line 47).

Art Unit: 1712

Claim 14:

The film thickness is .035 mm which converts to 35 micrometers (Marui, col. 9, lines 51-

52).

Claims 19-20:

A pattern is printed onto the thin film and may be carried out by any known printing

process (Marui, col. 5, lines 17-18).

Claims 13, 15-18:

These limitations are determined to be properties of the claimed composition. Where

the claimed and prior art products are identical or substantially identical in structure or

composition, or are produced by identical or substantially identical processes, a prima

facie case of either anticipation or obviousness has been established. In re Best, 562

F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). Additionally, "Products of identical

chemical composition can not have mutually exclusive properties." A chemical

composition and its properties are inseparable. Therefore, if the prior art teaches the

identical chemical structure, the properties applicant discloses and/or claims are

necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir.

1990).

Art Unit: 1712

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4231829 to Marui et al and US 3316190 to Suzumura et al in view of US 3220992 to Smyser et al.

Marui and Suzumura are discussed above but fail to teach the moisture content of the dried film. However, Smyser teaches a PVA film and a method for preparing a PVA film (col. 1, lines 10-15) wherein the slurrying and solubility characteristics of the PVA may be improved (col. 1, lines 57-60) by controlling the moisture content between 2% and 4% (col. 2, lines 28-38). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to produce the film of Marui and Suzumura with the moisture content of Smyser because Smyser states that doing so improves the slurrying and solubility characteristics of the PVA.

## Response to Arguments

- 7. Applicant's arguments filed 3/18/10 have been fully considered but they are not persuasive.
- 8. Applicant's claims are directed to a product; specifically, a hydraulic transfer printing base film comprising PVA and a nonionic surfactant. How the film behaves, in this case in a specific solution but really in general, and the resultant surface tension of a solution containing the surfactant are properties of the claimed composition. Since the combination of Mirui and Suzumura teaches a film of identical composition to the instant claims, the properties of that film are expected to be the same for the reasons provided above.

Art Unit: 1712

#### Conclusion

9. No Claims are allowed. All pending claims are rejected for the reasons set forth above.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX ROLLAND whose telephone number is (571)270-5355. The examiner can normally be reached on Monday though Friday, 9:00 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571)272-1418. The fax phone

Art Unit: 1712

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ALEX ROLLAND/ Examiner, Art Unit 1712

/Michael Cleveland/ Supervisory Patent Examiner, Art Unit 1712